

Appl. No. 09/698,106

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for transforming a dicot plant comprising the steps of:
 - (a) contacting a meristematic tissue of the dicot plant with a medium comprising DNA;
 - (b) ~~contacting~~ suspending a root ~~an area of the dicot plant below the meristematic tissue of step (a)~~ in buffer and contacting said root with a positive lead of a power source;
 - (c) contacting the medium comprising DNA with a negative lead of the power source;
and
 - (d) applying a low amperage current from the power source, thereby causing the DNA to migrate from the medium to the cells of the meristematic tissue of the dicot plant.
2. (Cancelled).
3. (Previously Presented) The method of claim 1, wherein the plant is a soybean plant.
4. (Cancelled).
5. (Original) The method of claim 1, wherein the plant is a seedling.
6. (Original) The method of claim 1, wherein the DNA is a plasmid vector.
7. (Original) The method of claim 6, wherein the plasmid vector is linearized.
8. (Previously Presented) The method of claim 6, wherein the plasmid vector contains a gene for barley oxalic acid oxidase.
9. (Original) The method of claim 1, wherein the current is about 0.01 to about 1.0 mA.

Appl. No. 09/698,106

10. (Original) The method of claim 1, wherein the current is about 0.1 to about 0.5 mA.
11. (Original) The method of claim 1, wherein the meristematic tissue is an apical meristem.
12. (Original) The method of claim 1, wherein the meristematic tissue is a lateral meristem.
13. (Original) The method of claim 1, wherein the meristematic tissue is a meristematic dome.
14. (Cancelled).
15. (Cancelled).
16. (Currently Amended) A stably transformed transgenic plant produced by the method of claim 1.
17. (Cancelled).
18. (Cancelled).
19. (Cancelled).
20. (Currently Amended) A stably transformed transgenic plant produced by the method of claim 8.
21. (Previously Presented) A method for producing seed of a transformed plant comprising the steps of:
 - (a) propagating the transformed plant produced by the method of claim 1;
 - (b) pollinating the transformed plant; and
 - (c) harvesting seed from the transformed plant.

Appl. No. 09/698,106

22. (Previously Presented) A method for transforming a plant comprising the steps of:

- (a) contacting a meristematic tissue of the plant with a medium comprising DNA, wherein said DNA comprises a plasmid vector having a T-DNA region and border sequences;
- (b) contacting an area of the plant below the meristematic tissue of step (a) with a positive lead of a power source;
- (c) contacting the medium comprising DNA with a negative lead of the power source; and
- (d) applying a low amperage current from the power source, thereby causing the DNA to migrate from the medium to the cells of the meristematic tissue of the plant.

23. (Previously Presented) The method of claim 1 wherein the plasmid vector contains the transgene.

24. (Previously Presented) The method of claim 22 wherein the plasmid vector contains the transgene.